

AMENDMENTS TO THE CLAIMS

With this Response to Final Office Action we have not amended our claims in any way. The listing of claims below represents the current claims in the Application:

Listing of the Claims:

Claim 1 (Previously Amended): A blood pressure-monitoring device,
comprising:

a first module configured to generate a first time-dependent signal;

an optical module comprising an optical source and an optical detector configured
to generate a second time-dependent signal;

a microprocessor configured to: i) receive the first time-dependent signal from the
first module and the second time-dependent signal from the optical module; ii) determine
a time difference between the first and second time-dependent signals; and iii) determine
blood pressure information from the time difference between the first and second time-
dependent signals;

a short-range wireless transmitter configured to transmit the blood pressure
information to a remote computer; and

a housing configured to be worn on a user's body that comprises the
microprocessor and the short-range wireless transmitter and connects to the optical
module.

Claim 2 is cancelled.

Claim 3 is cancelled.

Claim 4 (Previously Presented): The blood-pressure monitoring device of claim 1, wherein the optical source comprises a laser or a light-emitting diode.

Claim 5 (Previously Presented): The blood-pressure monitoring device of claim 1, wherein the optical detector comprises a photodiode.

Claim 6 (Previously Amended): The blood-pressure monitoring device of claim 1, further comprising a component adapted to be mounted on a user's finger that comprises the optical module.

Claim 7 (Previously Amended): The blood-pressure monitoring device of claim 6, wherein the component adapted to be mounted on the user's finger is an annular ring.

Claim 8 is cancelled.

Claim 9 is cancelled.

Claim 10 (Previously Amended): The blood-pressure monitoring device of claim 1, wherein the short-range wireless transmitter is a radio-frequency transmitter operating a peer-to-peer, part-15, 802.15, or 802.11 wireless protocol.

Claim 11 (Original): The blood-pressure monitoring device of claim 1, further comprising an external, secondary wireless component.

Claim 12 (Original): The blood-pressure monitoring device of claim 11, wherein the external, secondary wireless component comprises a short-range wireless receiver.

Claim 13 (Previously Amended): The blood-pressure monitoring device of claim 12, wherein the short-range wireless receiver is a radio-frequency receiver operating a peer-to-peer, part-15, 802.15, or 802.11 wireless protocol.

Claim 14 (Original): The blood-pressure monitoring device of claim 11, wherein the external, secondary wireless component further comprises a long-range wireless transmitter.

Claim 15 (Original): The blood-pressure monitoring device of claim 14, wherein the long-range wireless transmitter is configured to transmit information over a terrestrial, satellite, or 802.11-based wireless network.

Claim 16 (Previously Presented): The blood-pressure monitoring device of claim 15, wherein the long-range wireless transmitter is configured to transmit data over a wireless network operating on at least one of the following protocols: CDMA, GPRS, and analogs and derivatives thereof.

Claim 17 (Previously Amended): The blood-pressure monitoring device of claim 1, wherein the first time-dependent signal comprises a pressure waveform.

Claim 18 (Previously Amended): The blood-pressure monitoring device of claim 17, wherein the second time-dependent signal comprises an optical waveform.

Claim 19 (original): The blood-pressure monitoring device of claim 18, wherein the microprocessor comprises computer-readable code that processes both the optical and pressure waveforms to determine blood pressure.

Claim 20 is cancelled.

Claim 21 (Previously Presented): A blood pressure-monitoring device,
comprising:

a first module comprising a thin-film pressure sensor configured to generate a first
time-dependent signal;

an optical module comprising an optical source and an optical detector
configured to generate a second time-dependent signal;

a microprocessor configured to: i) receive the first time-dependent signal from
the first module and the second time-dependent signal from the optical module; ii)
determine a time difference between the first and second time-dependent signals; and iii)
determine blood pressure information from the time difference between the first and
second time-dependent signals; and

a short-range wireless transmitter that transmits the blood pressure information
to a remote computer.

Claim 22 (Withdrawn): A blood pressure-monitoring device, comprising:

a first module comprising an electrical impedance sensor configured to generate a
first time-dependent signal;

an optical module comprising an optical source and an optical detector
configured to generate a second time-dependent signal;

a microprocessor configured to: i) receive the first time-dependent signal from
the first module and the second time-dependent signal from the optical module; ii)
determine a time difference between the first and second time-dependent signals; and iii)
determine blood pressure information from the time difference between the first and

second time-dependent signals; and,

a short-range wireless transmitter that transmits the blood pressure information to a remote computer.

Claim 23 (Previously Presented): A blood pressure-monitoring device, comprising:

a first module configured to generate a first time-dependent signal;

an optical module comprising an optical source and an optical detector configured to generate a second time-dependent signal;

a microprocessor configured to: i) receive the first time-dependent signal from the first module and the second time-dependent signal from the optical module; ii) determine a time difference between the first and second time-dependent signals; and iii) determine blood pressure information from the time difference between the first and second time-dependent signals;

a short-range wireless transmitter that transmits the blood pressure information to a remote computer; and,

a patch that attaches the first module and the optical module to a patient.

Claim 24 (Previously Presented): A blood pressure-monitoring device, comprising:

a first module configured to generate a first time-dependent signal;

an optical module comprising an optical source and an optical detector configured to generate a second time-dependent signal;

a microprocessor configured to: i) receive the first time-dependent signal from the first module and the second time-dependent signal from the optical module; ii)

determine a time difference between the first and second time-dependent signals; and iii)
determine blood pressure information from the time difference between the first and
second time-dependent signals;

a location-determining component that determines location information of the
monitoring device; and,

a short-range wireless transmitter that transmits the blood pressure and location
information to a remote computer.

Claim 25 (Previously Presented): A patient monitoring system comprising:

a first module configured to generate a first time-dependent signal;

a watch component which comprises:

an optical module comprising an optical source and an optical detector
configured to generate a second time-dependent signal;

a microprocessor configured to: i) receive the first time-dependent signal
from the first module and the second time-dependent signal from the
optical module; ii) determine a time difference between the first and
second time-dependent signals; and iii) determine blood pressure
information from the time difference between the first and second time-
dependent signals; and

a short-range wireless transmitter that transmits the blood pressure
information to an external device;

a wireless network for receiving the blood pressure information from the external
device; and,

an Internet-based system which comprises:

- a gateway software piece which receives information from the wireless network;
- a host computer system comprising a database for storing the information;
- and,
- a website for displaying the information.